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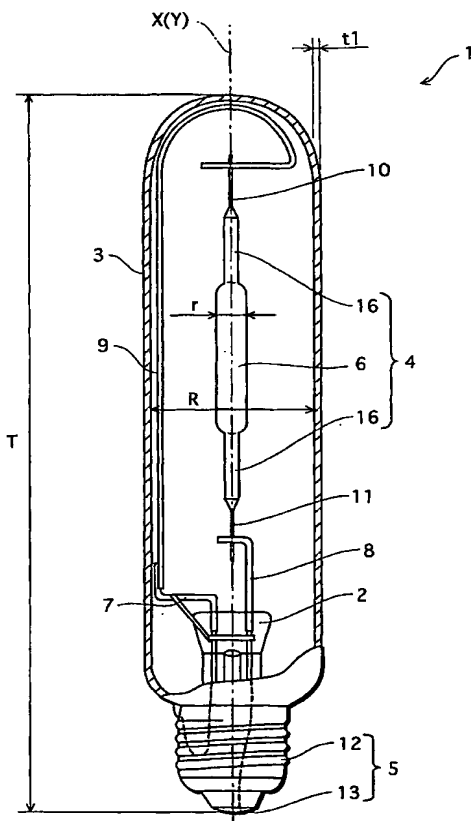
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(54) Title: METAL HALIDE LAMP AND LUMINAIRE



(57) Abstract: The present invention aims at providing a metal halide lamp having a configuration to achieve the following goals: to prevent the lamp from burning out during the life due to a rise in lamp voltage; and to obtain high luminous efficiency at the same time. The metal halide lamp 1 comprises: an arc tube 4 made of translucent ceramic and having a main tube part 6 in which a pair of electrodes 14 is disposed; and an outer tube 3 housing the arc tube 4 therein.  $4.0 \leq L/D \leq 10.0$ , where  $L$  (mm) is a length of a space between the electrodes 14 and  $D$  (mm) is an internal diameter of the main tube part 6.  $R/r \geq 3.4$ , where  $R$  (mm) is an internal diameter of the outer tube 3 and  $r$  (mm) is an external diameter in the main tube part 6 of the arc tube 4, within a region positionally corresponding to, in a radial direction of the outer tube and the arc tube, the space between the electrodes 14, on a cross-sectional surface where an outer circumference of the arc tube 4 comes closest to an inner circumference of the outer tube 3.  $M \leq 4.0$ , where  $M$  (mg/cc) is a density of mercury enclosed in the arc tube 4.



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